

Appln No. 10/796,597
Amdt date October 24, 2007
Reply to Office action of August 28, 2007

REMARKS/ARGUMENTS

Claims 1-62 are currently pending in the application, of which Claims 1, 31, 39 and 46 are independent and currently amended. Reconsideration and allowance of Claims 1-62 is respectfully requested.

I. New Matter Objection

The Examiner objected to the Amendment filed on July 16, 2007 under 35 U.S.C. 132(a) as allegedly introducing new matter into the disclosure. The Examiner states that the phrase: "a setting period immediately following the reset period, immediately following the reset period", is new matter. Applicants note that no such phrase can be found in the Amendment filed on July 16, 2007. The last part of the phrase "immediately following the reset period" appears to be a typographical error and is redundant. Applicants assume the Examiner is referring to Claim 39 which is amended in the previous Amendment.

The original specification states in reference to FIG. 4, for example, that "[i]n the misfiring erase period 200, the wall charges of the scan electrode Y and the sustain electrode X formed by unstable strong discharging during the ramp falling period 130 are erased. This way, a charge state that enables a normal emission of light is formed by further setting the discharge cells." (Emphasis added, p.11, line 14-17). Herein the "setting" period 200 immediately follows the reset period 100 as can be seen in FIG. 4. Furthermore, the specification states that "[t]he additional misfiring erase operations of FIGs. 14-20 may be referred to as additional setting or additional resetting." (Emphasis added, p.25, line 13-14). Therefore, Applicants submit that the specification fully supports the phrase "a setting period immediately following the reset period." Accordingly, Applicants respectfully request the new matter rejection be withdrawn.

II. Objection to the Specification

The Examiner objected to the specification under 37 C.F.R. § 1.75(d)(1) for allegedly failing to provide proper antecedent basis for the claimed subject matter. The Examiner states

Appln No. 10/796,597
Amdt date October 24, 2007
Reply to Office action of August 28, 2007

that first to sixth voltage levels are not identified in the drawings or the specification. Section 1.75(d)(1) requires that:

- (1) The claim or claims must conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description. (Emphasis added.)

Applicants respectfully traverse. Applicants submit that the first to sixth voltage levels are ascertainable by reference to the figures (FIG. 3, 4, 7-20) and the specification. As the Applicants extensively explained in the Amendment filed on July 16, 2007, one skill in the art can identify the first to sixth voltage levels by referring to the figures and the specification. The various voltage levels are clearly illustrated in the figures as waveforms and explained in the respective sections of the specification.

However, in the interest of moving this application to allowance, the Specification as amended now incorporates the first to sixth voltage levels language from the claims. These voltage descriptions represent only an embodiment of each, and are not limited there to. No new matter is added. Withdrawal of the objection is requested.

III. Rejections Under 35 U.S.C. §103

Claims 1-30 were rejected under 35 § U.S.C. 103(a) as allegedly being unpatentable over Setoguchi et al. (US 6,608,609) in view of Shiizaki et al. (US 2005/0052353). Claims 31-62 were rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Setoguchi et al. in view of Kanazawa (US RE 37083 E). To establish a *prima facie* case of obviousness, at least the following conduction must be met. The prior art reference (or references when combined) must teach or suggest all the claim limitations.

Claim 1 as amended calls for a "PDP being driven during a plurality of subfields of a frame, at least one of the plurality of subfields comprising a first reset period, . . ., wherein the first reset period comprises a rising voltage period and a falling voltage period, and a reset

Appln No. 10/796,597
Amdt date October 24, 2007
Reply to Office action of August 28, 2007

waveform applied to the first electrode gradually rises during the rising voltage period and gradually falls during the falling voltage period." (Emphasis added).

Setoguchi et al. and Shiizaki et al. do not teach, individually or in combination, a first reset period comprising a rising voltage period and a falling voltage period, and a reset waveform applied to the first electrode gradually rises during the rising voltage period and gradually falls during the falling voltage period. To establish a *prima facie* case of obviousness, however, the cited references together must teach or suggest all claim limitations. Independent Claim 1, therefore, would not have been obvious over the cited references at the time of the invention, and is allowable. Therefore, withdrawal of the rejection and allowance is requested.

Dependent Claims 2-30 directly or indirectly depend on Claim 1. As such, each of the Claims 2-30 incorporate all the terms and limitations of Claim 1 in addition to other limitations, which together further patentably distinguish these claims over the cited references. Therefore, Applicants request that the rejection of Claims 2-30 be withdrawn and that they be allowed.

Claim 31 calls for "[a] method for driving a plasma display panel (PDP) . . . , the PDP being driven during a plurality of subfields of a frame, at least one of the plurality of subfields comprising a reset period and an erase period following the reset period, the reset period comprising a rising voltage period and a falling voltage period, and a reset waveform applied to the first electrode gradually rises during the rising voltage period and gradually falls during the falling voltage period. . . ." (Emphasis added).

Setoguchi et al. and Kanazawa do not teach, individually or in combination, a reset period and an erase period following the reset period, the reset period comprising a rising voltage period and a falling voltage period, and a reset waveform applied to the first electrode gradually rises during the rising voltage period and gradually falls during the falling voltage period. To establish a *prima facie* case of obviousness, however, the cited references together must teach or suggest all claim limitations. Accordingly, Applicants submit that Claim 31 would not have been obvious over Setoguchi in view of Kanazawa at the time when the invention was made, and

Appln No. 10/796,597
Amdt date October 24, 2007
Reply to Office action of August 28, 2007

is allowable over Setoguchi in view of Kanazawa. Withdrawal of the rejection is respectfully requested.

Dependent Claims 32-38 directly or indirectly depend on allowable Claim 31. As such, Claims 32-38 each incorporate all the terms and limitations of Claim 31 in addition to other limitations, which together further patentably distinguish them over the cited references. Therefore, Applicants request that the rejection of Claims 32-38 be withdrawn and that these claims be allowed.

Claim 39 calls for "[a] method for driving a plasma display panel (PDP) . . . , the PDP being driven during a plurality of subfields of a frame, at least one of the plurality of subfields comprising a reset period and a setting period immediately following the reset period, the reset period comprising a rising voltage period and a falling voltage period, and a reset waveform applied to the first electrode gradually rises during the rising voltage period and gradually falls during the falling voltage period." (Emphasis added).

Setoguchi et al. and Kanazawa do not teach, individually or in combination, a reset period and a setting period immediately following the reset period, the reset period comprising a rising voltage period and a falling voltage period, and a reset waveform applied to the first electrode gradually rises during the rising voltage period and gradually falls during the falling voltage period. To establish a *prima facie* case of obviousness, however, the cited references together must teach or suggested all claim limitations. Thus, Claim 39 is not obvious over Setoguchi in view of Kanazawa, and is allowable.

Dependent Claims 40-45 depend, directly or indirectly, from allowable Claim 39. As such, Claims 40-45 each incorporate all the terms and limitations of Claim 39 in addition to other limitations, which together further patentably distinguish them over the cited references. Therefore, Applicants request that the rejection of Claims 40-45 be withdrawn and that these claims be allowed.

Appln No. 10/796,597
Amdt date October 24, 2007
Reply to Office action of August 28, 2007

Claim 46 calls for "[a] plasma display panel (PDP) comprising: . . . , the driving circuit for driving the PDP during a plurality of subfields of a frame, at least one of the plurality of subfields comprising a reset period and an address period, the reset period comprising a rising voltage period and a falling voltage period, and a reset waveform applied to the first electrode gradually rises during the rising voltage period and gradually falls during the falling voltage period." (Emphasis added).

Setoguchi et al. and Kanazawa do not teach, individually or in combination, a reset period comprising a rising voltage period and a falling voltage period, and a reset waveform applied to the first electrode gradually rises during the rising voltage period and gradually falls during the falling voltage period. To establish a *prima facie* case of obviousness, however, the cited references together must teach or suggested all claim limitations. Thus, Claim 46 is not obvious over Setoguchi in view of Kanazawa, and is allowable.

Claims 47-62 depend, directly or indirectly, from independent Claim 46. As such, Claims 47-62 each incorporate all the terms and limitations of Claim 46 in addition to other limitations, which together further patentably distinguish these claims over the cited references. Therefore, applicants request that the rejection of Claims 47-62 be withdrawn and that these claims be allowed.

IV. Concluding Remarks

In view of the foregoing remarks, Applicants earnestly solicit an early issuance of a Notice of Allowance with Claims 1-62. If there are any remaining issues that can be resolved over the telephone, the Examiner is cordially invited to call Applicants' attorney at the number listed below.

Appln No. 10/796,597
Amdt date October 24, 2007
Reply to Office action of August 28, 2007

Respectfully submitted,
CHRISTIE, PARKER & HALE, LLP

By



Derek W. Yeung
Reg. No. 57,472
626/795-9900

VSJ PAS756435.2-* 10/24/07 2:09 PM